

Hughes (C. H.)

[Reprint from THE ALIENIST AND NEUROLOGIST, April, 1896.]

A NEUROLOGIST'S FAREWELL.

VALEDICTORY TO THE GRADUATING CLASS, BARNES MEDICAL COLLEGE.

By C. H. HUGHES, M. D.

Professor of Psychiatry and Neurology, and President of the Faculty.

BACK in the old homestead under whose kindly roof and within whose cherished walls you were sheltered from earliest childhood till the time came when you went out into the wide, wide world to begin the making of your fortune and to work your way to fame, perhaps, there sits at this very moment, doubtless, one who, slowly rocking to and fro in that cherished room which first heard the sound of your childhood's earliest prattle and witnessed your first feeble efforts at getting on in the world, is thinking, thinking, thinking only of you. Boys, it is your mother or one who sustains to you the similitude of that sacred relationship, or it may be your mother is among the saints in Heaven and that her place is filled by an older sister or some other relative, or a nearer and dearer one far than all other. Whoever it may be, it is a woman. Some woman's heart and the blessed spirit of a woman's love has followed you here to-night.

It may be the fair faced, sweet eyed girl you left behind you at the gate of her father's house with warm hand press, an affectionate kiss and a manly promise to do your duty. If so, her noble injunction, "John, no matter how much I shall want to see you, don't come back without your sheepskin," has been one of the inspirations that has brought the triumph of this hour.

[1]

LIBRARY
SURGEON GENERAL'S OFFICE

DEC.-4---1897

596.

When you left your home, your father, too, who himself had learned and proven the value of character to a man in working his way through the world, sterner and less tender perhaps in his manner, but no less sincerely interested in your welfare, said, "In the battle of life before you, be a man, my son." "Be a hero in the strife." Do your duty. Be true to the principles of honesty, integrity and truth. Work and you will win. He said, perhaps not in words, but in heart,

"To thine own self be true,

"And it must follow, as the night the day,

"Thou canst not then be false to any man."

And your mother, in her heart of hearts, what did she say to you, my boy? She said, or felt, as that Roman matron felt and said to her son as she bade him farewell and sent him to the front where the banners of Cæsar waved and the victorious eagles of ancient Rome were to float triumphant above the shout and din of battle and scenes of carnage, "return with your shield or on it." And so does every true modern mother say. She loves her son, but she would rather see him die in the strife than be a coward in the battle of life.

Gentlemen, you have won the fight. You may now go home with the trophies of victory. But this is but the first engagement of your campaign. You have endured its discipline and trials so far with persevering fortitude and admirable courage. You have marched into an unknown country, conquered it and made yourselves its masters. I myself have led you from the fourth ventricle, the seat of origin of so many of the cranial nerves, through the *iter a tertio ad quartum ventriculum*. You have surveyed with me the bridging commissures of the former and the valve of Vieussens that covers the latter. We have lifted up the fornix, found and removed the choroid plexus on its margin, and the *velum interpositum* beneath. We found the lyre there also, and you will find liars innumerable in your pathway in the world outside. In this vicinity underneath we found the corpora quadrigemina and the little fourth nerve, and close by laterally and a little anteriorly, the geniculate

bodies, and superimposed we found and removed the pineal gland with its sandy concretion which Descartes supposed was the seat of the soul, because, I presume, he always found grit in it, which every true soul is supposed to have, and which you must all have, just as a chicken must have "sand in its craw" to live in this life of conflict in which the fittest survives, the best and truest fighter wins, while the unfit, the weak, the craven and the cowards fail and die.

You went into the foramen of Monroe and the lateral ventricles, into the basal ganglia, (the thalamus opticus, the corpus striatum) and the internal capsule, the external capsule, the claustrum and the insula on either side nigh them. You took a last view of the caudate and lenticular nuclei, the tinea semi-circularis before the operculum and the fillet of Reil, you followed me from the cortex down the motor tract between the caudate and lenticular nuclei and optic thalamus into the crura cerebri and under and through the Pons Varolius into the cerebellum and the pyramids, saw the place of the lemniscus and back again to American soil, whence we started. You have made a neurological excursion, a campaign of conquest, into the territory of the cerebrum and have won a victory. You voyaged over the circle of Willis up into the country of the Sylvian fissure, followed the irrigating artery of the contiguous territory, the anterior and middle lobes of the cerebrum, and studied some of its diseases which science seeks to conquer.

You traced the tractus opticus from the chiasm and beyond in the retina to its lair in the quadrate tubercles geniculate bodies and the occipital lobes. You have looked with me from the mamillary eminences and between the commissure of the thalami down into the third ventricular cavernus with naked eye or in fancy wandering, and crossed laterally over ventricular territory into the "*bodfi*" route of the Hippocampi majores. You sailed "around the horn" as it were. You have explored the convolutions of the psycho-motor centers and their motor tracts, and the sensory tracts through the optic beds and into the cerebellum by means of the peduncles and searched for the foes of

health that lurk about these regions. You have stood faithfully around the demonstrator's table of our worthy colleague and your capable leader, Prof. Keiffer, and been led along arduous pathways to glorious victory by each member of the faculty and they each and all commend your industry, your courage, your fidelity, your zeal, and a body of distinguished visitors has specially commended your enthusiasm.

In the campaign, you have acquitted yourselves like true soldiers of science, and in all the other lines of duty, you have done likewise, as the review examinations on which we base the bestowal of these parchments testify. They are your trophies and our awards of merit. If you labor as diligently, as faithfully, as courageously hereafter as you have done to this hour in all the campaigns of the battle of life before you, you will be victorious. And when you sit down to take a retrospective view of the conflict and your part in it, as men are wont to do, and count up your triumphs and your failures, your weaknesses and your sins, and your strong efforts resistive of life's temptations, as all good men sometimes do, I trust that you will find that you have been faithful to the sacred trust these parchments impose upon you, that you have ever stood in all your dealings with mankind upon the high "vantage ground of truth," for no pleasure is comparable, as Bacon said, to such an attitude before the world. That you will have been virtuous, as your high and honorable calling demands, in all adversity remembering and getting the reward of the well known fact that,

"The good are better made by ill,

"As odors crushed are sweeter still,"

that you may glean from your life's trials and duties the true advantages of experience, growing wiser with years, subtler, deeper, and more logical and efficient in all that pertains to your own and your patient's welfare.

You have gone over much more cerebral territory than I have enumerated. You have traversed the *terra incognita* of the soul's dwelling place in the seven layers of the gray matter and as you studied the ganglion cells of the gray cortex and marvelled at the myriad cells for reception and

emission of cerebro-psychic impression, you have realized how wonderfully wrought is the brain of man and come to comprehend with the physician's insight, "by sight of science," how, when time, or disease, or toxic agents touch these centers of mental impression and expression, normal function fails and is perverted in this supreme mechanism of the Great Architect, just as in the lesser mechanisms of puny man's contrivance. You have seen a centre clogged by a clot of blood about and below the paracentral lobule and further down the Rolandic fissure and motion in the legs has ceased, and further down the bordering convolutions of the Rolandic fissure thus pressed upon, the hand has lost its cunning, if lower still the power of word expression and ideation has failed and if further back in the medulla the tongue has "cleaved to the roof of the mouth" and the heart and lungs have refused to do their normal duty. An aneurism, an embolus or thrombus, an extravasation or a focus or foci of softening has wrought this ruin in motor or vital centres of the brain; or the psychical centres from the same or other cause have been gravely pressed upon and the machinery of mind has stopped stock still or gone on with halting and perverted movement, with the mentality perverted and transformed, as in insanity or delirium. You have seen the effect of the unseen toxic touch of the intangible virus of a fever or a fatal drug on this wondrous cerebrum or its meninges, and finally you have seen how "the poor brain doth, by the idle comments that it makes, foretell(to you) the ending of mortality," when the disorganized blood of typhoid or typhus carries poison in lieu of nutrition to the ganglion cells of the gray cortex whose life in the organism is the true physiological blood thereof.

All this and much more have you noted with me during the course which ends to-night. You have gone with me down the motor columns of the spinal cord, followed the direct and the pyramidal tracts and up the posterior and the lateral columns and interior peduncles noting their peculiar diseases revealing differing symptoms according to locality, as individuals do speech, according to the country of their birth and residence.

You have noted here especially the great reflex centers, particularly in the lumbo-sacral spine, the cilio-spinal centres of the cervical area and the vital reflex centers of the medulla and many the nerve origins of the medulla and pons regions. You have studied their significance in health and disease, appreciated their signal aid in diagnosis and wondered again at the intricate mechanism and nice adjustment to end, in the machinery of man, comparing it with the machinery of man's contrivance, you have thought with Alexander Pope how,—

In human purpose, though labored on with pain,
A thousand movements scarce one purpose gain.
In God's, one single can its end produce
And yet serve second to some other use.

Such is the mechanism of the cerebro-spinal axis, to say nothing of its attendant system of peripheral nerves in the sensory and motor and sympathetic systems with the wonderful ganglionic centres of the latter. But this neural journey into the vast territory of the neurones, neurils, cells and proliferations must end, like our most pleasant companionship of the past year. We have together fought away many obstacles and blazed many pathways in companionship with each other. We have marched through neurologia and neuropathia, psychiatria and psychopathia, to the open neurologic and neuriatric sea.

Besides all this you have looked with microscopic vision into the infinitely minute cosmos of the cerebral hemispheres, mesocephalon, etc., and spinal cord of man, and seen the potentiality of ultimate cells and the wondrous conducting power of microscopic strands of nerve fibre. You have with mental vision gone further, "where no eye can see, no glass can reach." You have heard this faculty "expatiate free o'er all this scene of man; a mighty maze, though not without a plan," as your progressing study proved.

In the great mechanisms of mind, sensation, perception, reflection, emotion, and the motor, nutritional and metabolic movements in the domain of the cerebro-spinal with its attached trophic and sympathetic systems, you have found, indeed, a "vast chain of being which from God began" and discovered

how "all are but parts of one stupendous whole," like the great universe to which Pope referred, whose life the blood is and the nerves the soul, as we know by sight of physiological and chemico-biological science, and the Röntgen rays of advancing science are constantly clearing our vision into the depth of things pertaining to medicine.

Adendum.—This impromptu address is published as it was delivered with out such emendatory elaboration as might have made it more exact but less suited to enlist the simultaneous interest of a body of students and a non-medical audience.
